Rat	Stunting Period Began at		Growth Resumed at		Brood I			Brood II			Brood III			Brood IV			Brood V			Brood VI			Death	
	Age	Weight, Gm.	Age	Weight, Gm.	Age	No. in Litter		Age	No. in Litter		Age	No. in Litter		Age	No. in Litter		Age	No. in Litter		Age	No. in Litter		Age	Cause
						Born	Survived		Born	Survived		Born	Survived		Born	Survived		Born	Survived		Born	Survived		
2031 ♀	1 mo. 13 da.	48	17 mo. 21 da.	108	23 mo. 19 da.	4	4	25 mo. 21 da.	5	5	28 mo. 5 da.	3	2										32 mo. 18 da.	Lung disease
2339 ♀	1 mo. 8 da.	48	13 mo. 0 da.	104	17 mo. 17 da.	8	6	19 mo. 23 da.	9	9	22 mo. 11 da.	8	8	28 mo. 9 da.	1	0	29 mo. 20 da.	6	6	31 mo. 25 da.	2	0	32 mo. 15 da.	Lung disease
2369 ♀	1 mo. 15 da.	79	12 mo. 15 da.	103	16 mo. 23 da.	12	12	19 mo. 2 da.	7	6	21 mo. 7 da.	12	12	25 mo. 9 da.	2	2							27 mo. 17 da.	Lung disease
2446 ♀	1 mo. 13 da.	90	6 mo. 4 da.	90	16 mo. 0 da.	7	7	18 mo. 0 da.	3	1	20 mo. 19 da.	10	9	25 mo. 9 da.	5	0							26 mo. 10 da.	Lung disease

fertile. According to Donaldson[2] the menopause normally occurs at the age of 15 to 18 months, although he reports one female which, mated at the age of 22 months, produced a litter of one. The young was not reared, however.

Four of our stunted females were mated at various times. The results are summarized in tabular form. Data regarding their early stunting and subsequent resumption of growth have been published elsewhere.[4] In every case the female was not remated until some time after the birth of a litter, as the maximum number of broods which she could bear was of much less interest than the final age at which she was capable of producing young. Although none of these rats began breeding until they had reached an age when normal rats are commonly believed to be approaching the menopause, they produced from three to six litters of young and successfully reared all but a few of them. Their young were apparently as vigorous as those born of younger mothers. Hence the menopause has been postponed long beyond the age at which it usually appears. In view of this, and the added fact that less than one third of our stock rats have reached an age of more than two years, whereas all of these stunted females lived longer, it appears as if the preliminary stunting period lengthened the total span of their life.

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THE MATHEMATICAL ASSOCIATION OF AMERICA

THE second annual meeting of the Mathematical Association of America was held at Columbia University, New York City, on Thursday, Friday and Saturday, December 28–30, 1916, in affiliation with the American Association for the Advancement of Science. There were 184 persons present at the various meetings, including 141 members of the association. The first meeting was a joint session

[4] Osborne, T. B., and Mendel, L. B., *J. Biol. Chem.*, 1915, XXIII., 439; *Am. J. Physiol.*, 1916, XL., 16.

with the American Mathematical Society, Section A of the American Association, and the American Astronomical Society. At this session Professor Ernest W. Brown, the retiring president of the society, gave his retiring address on "The Relations of Mathematics to the Natural Sciences." This was followed by the retiring address of Professor A. O. Leuschner, vice-president of Section A of the American Association, on "Derivation of Orbits—Theory and Practise." A joint dinner of these four organizations was held Thursday evening, following which speeches were made by Professor Florian Cajori, President R. J. Aley, Mr. William Bowie, Professor J. A. Miller, Mr. G. A. Plimpton, and Professor Dunham Jackson.

The meeting on Friday morning was first addressed by Professor Florian Cajori, of Colorado College, who read a paper on "Discussions of Fluxions from Berkeley to Woodhouse." Professor M. W. Haskell, of the University of California, gave a paper entitled "University Courses in Mathematics Intended for Teachers of Secondary Mathematics." This was followed by a discussion led by Professor J. W. Young, of Dartmouth College, and Professor Edward Kasner, of Columbia University. During the time between the morning and afternoon sessions, opportunity was afforded by Professor David Eugene Smith for the inspection of his admirable collection of portraits and medals of mathematicians. On Friday afternoon was held the meeting of institutional delegates. This department of the association was organized for the consideration of those phases of collegiate mathematics which are of an institutional character rather than of merely individual interest; such questions as entrance requirements, requirements for degrees, maintenance of libraries, etc., will properly come under this department. The program was devoted to the subject of mathematical libraries, and consisted of a paper on "A Nucleus for a Mathematical Library," by Dr. T. H. Gronwall, of New York City, and of the reading of a report from the recently appointed library committee by the chairman, Professor W. B. Ford, of the University of Michigan, with an accompanying discussion. The program closed on Saturday morning with an address on "The Mathematics of Aërodynamics" by Professor E. B. Wilson, of the Massachusetts Institute of Technology, with a discussion led by Professor A. G. Webster, of Clark University.

The annual election is conducted both by mail and in person at the meeting; in this way a total of 405 ballots was received. The list of officers elected for the year 1917 is given herewith:

President, Florian Cajori.

Vice-presidents, Oswald Veblen, D. N. Lehmer.

Secretary-Treasurer, W. D. Cairns.

Members of the executive council to serve until January 1920, E. R. Hedrick, Helen A. Merrill, R. E. Moritz, D. E. Smith.

E. V. Huntington was chosen by the council to fill the vacancy caused in the council by the promotion of Professor Cajori to the presidency.

Fifteen persons and sixteen institutions were elected to membership; thus 1,064 individuals (deducting the number of those who have died during 1916) and 76 colleges and universities of the United States and Canada now hold membership in the association. Applications from thirteen individuals and one institution have been received since the New York meeting.

The association has a system of sections organized by the members of the various groups, mostly those within state lines. Such sections now exist in Kansas, Ohio, Missouri, Iowa, Indiana, Kentucky and Minnesota, with a section covering Maryland, the District of Columbia, and Virginia.

The report of the treasurer showed that a fund of $958.72 had been transferred to the association from the former management of the *American Mathematical Monthly,* and that the business for the year 1916 closed with a balance of approximately two hundred dollars.

An important arrangement has been entered into by the association with the *Annals of Mathematics,* which bids fair to exert an important influence upon the development of collegiate mathematics, in that it will foster the production and publication of articles of an expository and historical nature. In consideration of a subvention from the association, the board of editors of the *Annals* will increase the size of the magazine from 200 pages (its present size) to 300 pages annually, beginning with the number for June, 1917. The subscription price for individual members of the association will be one half of the ordinary price, which latter will be three dollars instead of the present price, two dollars.

The summer meeting of the association will be held by invitation of Case School of Applied Science and Western Reserve University at Cleveland, Ohio, on September 6 and 7, in conjunction with the meeting of the American Mathematical Society, with which the association has rightly so much in common. The next annual meeting will be held by invitation at the University of Chicago next December, in connection with the meeting of the Chicago Section of the society.

W. D. Cairns,
Secretary-Treasurer